

## ABSTRACT

A method for manufacturing a heterojunction bipolar transistor is provided. An intrinsic collector structure is formed on a substrate. An extrinsic base structure partially overlaps the intrinsic collector structure. An intrinsic base structure is formed adjacent the  
5 intrinsic collector structure and under the extrinsic base structure. An emitter structure is formed adjacent the intrinsic base structure. An extrinsic collector structure is formed adjacent the intrinsic collector structure. A plurality of contacts is formed through an interlevel dielectric layer to the extrinsic collector structure, the extrinsic base structure, and the emitter structure.

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